

LIME SOLVENT

The product shall be a non-abrasive liquid acid detergent for de-liming and stain removal from metal, glass, ceramic, and tile or cement surfaces. To be used for "in place" or manual cleaning.

The product shall be compounded for specially selected acidic raw materials and organic detergents to reduce or eliminate attack on equipment to be cleaned while providing maximum cleaning speed and reduce labor.

The product shall be designed for use in all water conditions.

The product shall be completely soluble in distilled water, and the pH by weight of a 0.1% solution in distilled water shall be within the range of 2.5 – 2.9.

The product shall contain a low foaming wetting agent of the type not causing excess foaming while being pumped and re-circulated.

The product shall be clear, emerald green color.

The product, when handled and used as recommended by the seller, shall give satisfactory results as judged by the responsible head of each department where used.

The reaction products shall be soluble. Removed soils shall be held in suspension for ease of disposal.

The product shall be supplied in 4-1 gallon bottles per case.

The chemical analysis of the product shall fall within the following ranges:

Nonionic (active Synthetic Detergent)	1.0 – 3.0%
Vehicles and Buffering Agents	40.-65.0%
P as Phosphorus	Less than 8.7%
Biodegradable and USDA approved	YES

THE BIDDER SHALL STATE:

PRODUCT OFFERED _____ PRICE PER GALLON _____

WEIGHT AND TYPE OF CONTAINER _____

NONIONIC (active synthetic detergent) _____

VEHICLES AND BUFFERING AGENTS _____

P AS PHOSPHOROUS _____ BIODEGRADABLE AND USDA APPROVED _____

DISHWASHING MACHINE DETERGENT

The product shall be a 100% active machine dishwashing detergent in a solid capsule equipped with a handle for ease on handling. The solid detergent shall contain a stable source of chlorine, water, conditioners, a defoamer, and maximum strength alkalies, to deliver maximum performance in all soil and water conditions. The detergent capsule shall be designed to eliminate misuse by employees, to provide maximum safety and control of detergent usage and costs. The solid detergent capsule shall be fed and controlled by an electronic controller designed for use as an automatic detergent concentration controller. The product shall be biodegradable. The product shall contain phosphates and non phosphate water conditions. The product shall meet the following:

Chlorine	.5 – 1.5%
Defoamers	.5 – 1.5%
Active Alkalinity as Na2O	30.0 – 40.0%
Total titratable alkalinity	
As Na2O	36.0 – 46.0%
Phosphate as P	Less than 8.7%
Carbonate as CO2	Trace

State mfr./brand and number _____

State use dilution _____ oz. per 10 gallon of water at \$ _____ oz.

\$ _____ per (10) gallons of usable product.

Packing _____ Shipping weight _____ lb./cs. Unit Price _____

POT AND PAN DETERGENT

The product shall be a non-abrasive cleaning material suitable for cleaning of all glassware, pots, pans, and silverware, etc. The product may be used as a general purpose cleaner in the kitchen. The product shall be an extra-concentrated solid, dispensed at use concentration through a dispenser. The product shall be designed for use in all water conditions. The product shall be completely soluble in distilled water at concentration of up to 1% at 80F.

Physical characteristics:

Ph 1% solution	7.5 – 9.0
Non volatile at 105C	89.0 – 92.0

Density 0.85 – 0.95

The product is freeze/thaw stable 0.85 – 0.95

The product shall be available in lithographed plastic capsules.

The chemical composition of the product shall fall within the following ranges:

Nonionic detergent 18 – 24%

Anionic detergent 42 – 46%

Phosphate as P 0%

The product shall contain hard ABC detergents. The product when used as recommended by the seller, shall give results, which are satisfactory, as judged by the head of each school where used. The product shall be high sudsing and more highly concentrated than other detergents therefore; only 1/6 to 1/4 as much product would be used.

State mfr./brand and number: _____

State use dilution: _____ oz. per 10 gallon of water at \$ _____ oz.

\$ _____ per (10) gallon of usable product. Packing: _____

Shipping weight: _____ lb./cs Unit price : _____

DRYING AGENT

This specification covers a chemical surface active agent (commonly called a drying agent or a rinse additive) which, properly proportioned and mixed with the final rinse water of a commercial spray washing machine, will speed drying time, reduce water spotting, filming, and improve sanitary conditions of eating utensils washed in the silverware washing machine. It shall meet the following requirements:

1. The product shall not contribute to foaming in the dishwashing machine and shall have a foam depressing effect on food when present in the re-circulated solution tanks that use concentrations.
2. The product shall be concentrated liquid of non-ionic nature, free-flowing at ordinary room temperatures.
3. The product shall effectively accomplish the specified functions when present in the rinse water at concentrated of 50 to 200 parts per million.
4. The product shall perform satisfactory in soft or hard water areas when optimal operating conditions are present.

5. Stability and/or shelf life of the product shall be such that it will remain in stable condition when cooled to 10F or held at 100F for a period of one month and then returned to room temperature (75F).

The product shall meet the following standards:

Ph of a 100% solution	8.5 – 9.5
Cloud point (100%)	118 – 128F
Specific gravity @20C	1.012- 1.022
Haze point (100%)	4.44C
Biodegradable	YES
USDA	YES
Phosphorus	None

State mfr./brand and number: _____

State use dilution: _____ oz. per 10 gallon of water at \$ _____ oz.

\$ _____ per (10) gallon of usable product. Packing: _____

Shipping weight: _____ lb./cs Unit price : _____

SANITIZER

Food contact surface sanitizer

Iodophor germicidal detergent. 1.75% titratable iodine in an acidic, non-ionic detergent base. For good service sanitizing of food preparation equipment and dishware. One gallon makes up to 1,280 gallons of sanitizing rinse solution. One half ounce per 2-1/2 gallons of 75-100F water sanitizing (provides 25 ppm tit.1). **No rinsing necessary.**

State mfr./brand and number: _____

State use dilution: _____ oz. per 10 gallon of water at \$ _____ oz.

\$ _____ per (10) gallon of usable product. Packing: _____

Shipping weight: _____ lb./cs Unit price : _____

BID AWARDING PROCEDURES

Award of each item will be made for cost of ten (10) gallons of usable product under normal conditions, as advertised in manufacturer's written advertised literature. If challenged, bidder/vendor must bear the cost of testing product by an independent laboratory. Failure of one product will be cause to reject or terminate vendor's bid/award. Vendor must submit printed literature indicating usage. Failure to submit said literature with bid will result in bid becoming non-responsive.

Formula used to evaluate products: For ten (10) gallons of product:

- A. Cost of container divided by 128 (oz. per gallon) or 16 oz (oz. per lb.) – cost per oz.
- B. Cost per ounce X average recommended usage (ounces) for 1 gallon of water = cost per gallon of usable product.
- C. Unit cost of 1 gallon of product X 10 = cost for 10 gallons of product.
- D. Example: Cost per case of product
\$51.00, packed (6) 1 gallon containers.
\$51.00, divided by 6 = \$8.50 per gallon
\$8.50 divided by 128 = \$.0664 cost of material per ounce.
Manufacturers recommended use is ½ ounce per 1 gallon of water.
\$.0664 divided by 2 = \$.0332 per gallon of water.
\$.0332 X 10 gallons = \$.332 use cost per 10 gallons of product.

SERVICE TECHNICAL ASSISTANCE

Contractor shall provide a minimum of one (1) service call at intervals not to exceed four (4) weeks during the contracted period.

Service calls shall be made by representative(s) of product manufacturer who shall have been technically trained and employed by manufacturer for a period of not less than one (1) year during which representatives' responsibility shall have been the servicing of institutional dishwashing machines.

Contractor shall provide to each school participating in this contract the name, address and telephone number of the manufacturer's service representative nearest that school with a copy sent to Food Service Department.

Contractor/Representative shall be solely responsible for coordinating service visit(s) with dietary manager and for ensuring that any or all of the following services are provided to manager's satisfaction while agency is utilizing contactor's product (s):

1. Inspect and properly maintain all dispensing equipment.
2. Perform an alkalinity test of wash water to determine whether the proper amount of compound is in use at time of the call. Test will show whether too much or too little chemical is being used.
3. Check temperature of wash and rinse water. If below proper standards for an efficient, safe operation, steps will be taken with the manager to correct. The service technician will be qualified to make recommendations on proper heating equipment and controls.
4. Wash arms are to be checked for efficient operation. If clogged, the service technician will clean, and will instruct the operators how to do this frequently. Rotating wash arms will be checked for proper pitch and pressure. Wash and rinse bearings will be checked to see that arms are revolving freely.
5. Rinse spray will be checked. If clogged, these will be cleaned. If not fanning out sufficiently, these will be adjusted.
6. Pumps are to be checked for leaks.
7. Fill steam and rinse valves are to be checked for leaks and proper adjustment will be made if needed. Rinse trips and assemblies will be adjusted wherever needed.
8. Conveyor belts are to be checked for broken links. Dogs on conveyor rack machines are to be checked for proper tolerance to see that baskets are pushed through as per the machine requirements.
9. Overflow and drains are to be checked for proper operations.
10. Grease cups and oil ports are to be checked for proper lubrication. The service technician will discuss this with the manager at each school site.
11. Proper racking of dishes will be checked.

12. Scrapping procedures will be checked and lunchroom personnel will be instructed on how to prevent food soil from entering the machine.
13. Stock will be checked on each call. The service technician will be trained to determine the correct amount of compound necessary to bring about good results. If too much compound is being used in the dishwashing machine, or wasted, it is his/her job to inform the manager of the school site.

At the time of each service (and emergency) visit a written report in triplicate on contractor's standard form shall be completed. One copy shall be retained by the school, a second copy shall be for the contractor's file and final copy to be collected and submitted by contractor to the Food Service Department on or about the 15th of the following month. Each report shall provide at least the following:

1. Name of using agency.
2. Manufacturer and model of dishwashing(s) (serial number is available).
3. Location of dispenser(s).
4. Type of dispenser(s).
5. Detergent brand name used.
6. Actual detergent concentration by titration.
7. Wash water temperature.
8. Rinse agent brand name used.
9. Actual rinse agent concentration.
10. Rinse water temperature.
11. General performance of machine.
12. Statement of any and all needed repairs to machine and respective correctional measures taken and/or recommended.
13. Chemicals ordered and quantity.

Additionally, as requested by agency and within twenty-four (24) hours of such request, contractor shall provide any and all emergency repair service(s) to dispenser(s) and/or dispenser installation(s) to include all parts and labor.

NOTE: The Procurement Services Division reserves the prerogative at any time during the period of contract to have a responsible party confirm by titration or other means the actual dilution of dispensed machine detergents and rinse agents utilized at any state agency.